

## Cottonwood Creek TMDL Implementation Successes

The Cottonwood TMDL and sub-basin assessment was completed in 1999 encompassing approximately 124,439 acres, located entirely within the Camas Prairie in North Central Idaho. The implementation plan was completed in early 2000. The vast majority of the Cottonwood Creek Watershed is in agricultural production and is privately owned. The estimated sediment load reductions for the five tributaries range from 60 to 95 percent, with a total load reduction at the mouth of Cottonwood Creek at 15,660 tons/year (among other load reductions). The Cottonwood Watershed Advisory Group (WAG) and Idaho Soil and Water Conservation District (ISWCD) were approved for a 319 Grant application in 2001. Implementation of Best Management Practices (BMP's) were initiated using these grant monies; with several other sources of cost-share dollars being added as implementation progressed. The Cottonwood Creek TMDL implementations are now in their second phase. Through the process of implementation there has been many challenges and successes.

This presentation will highlight the progress of the implementation project to date and cover some of the challenges experienced. There have been BMP's implemented on 9,717 acres (14% of the agricultural critical acres) within the watershed as of December 2003. RUSLE Modeling indicates that sediment losses from cropland have been reduced by approximately 43,570 tons/year. Infiltration, aggregate stability and earthworm counts are continuing to improve with the implementation of direct seed systems in the watershed. Nutrient Management Systems combined with Direct Seed Systems allow for plants to utilize greater amounts of applied fertilizer and reduce fertilizer applications, which decreases the potential for nutrient leaching and runoff. Approximately 240 head of cattle have been removed from stream banks during the winter and spring runoff season. Removal of livestock from creek areas decreases nutrient and bacteria loading of the creeks and allows for stream banks to re-vegetate, reducing sediment losses.

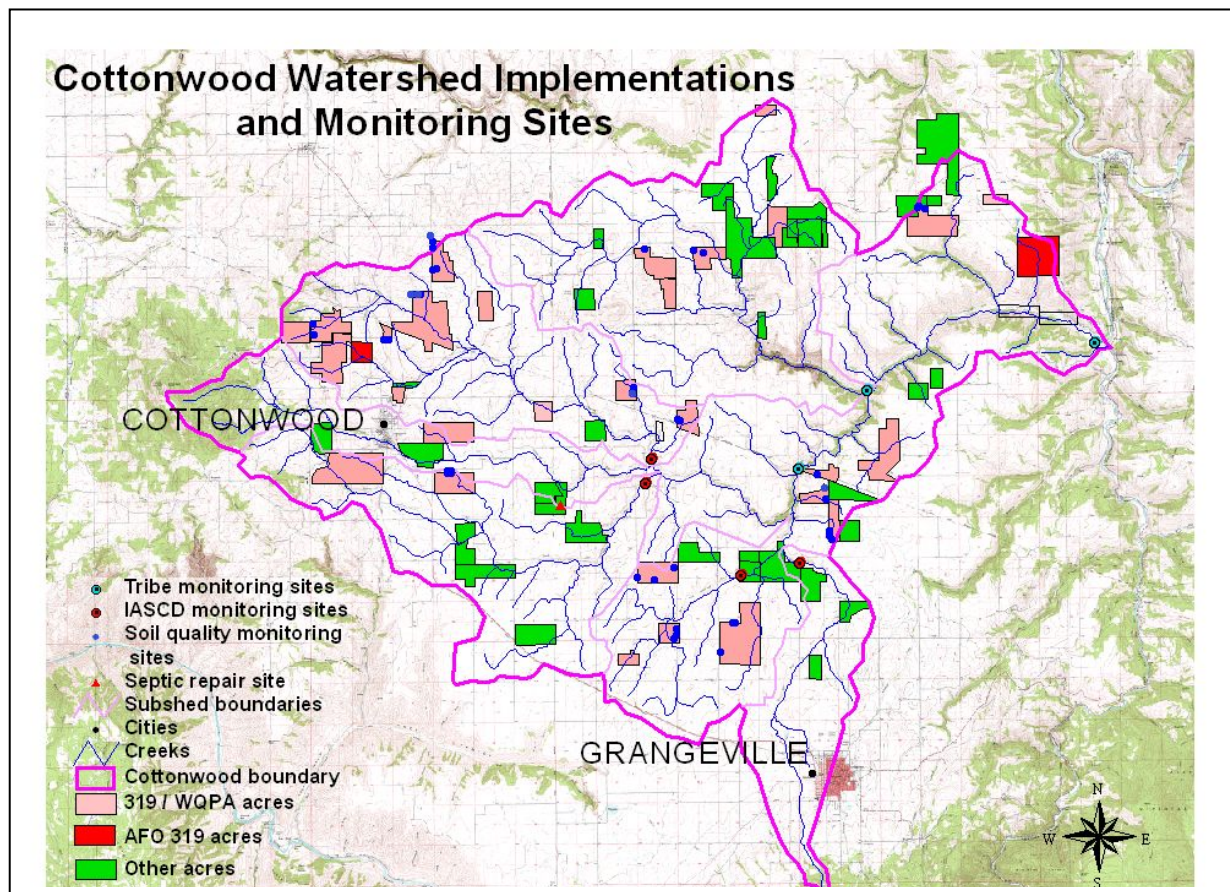


Figure 1: Cottonwood Creek TMDL Implementations and Monitoring Sites

Eileen L. Rowan

Water Quality Resource Conservationist – Idaho Soil Conservation Commission

Eileen graduated from the University of Idaho with a BS and MS in Soil Science. She worked with the US Forest Service in Cody, WY for five years as a Soil scientist. Eileen started with the Idaho Soil Conservation Commission in 1997 in the soil survey program. In 2000, she started working with the Idaho Soil and Water Conservation District in Grangeville, ID on the Cottonwood Creek TMDL Implementation Project. Eileen's extensive soil science background has been an asset to implementation efforts and Best Management Practice (BMP) effectiveness monitoring using the soil quality kit.

Eileen Rowan

2200 Michigan Ave

Orofino, ID 83544

(208) 476-7006x107

(208) 476-7365 FAX

[erowan@agri.state.id.us](mailto:erowan@agri.state.id.us)